

## Ancorloy® HP-1

Ancorloy HP-1 is a new press-ready, engineered binder-treated premixed ferrous P/M material designed for enhanced as-sintered mechanical properties. It has comparable performance to a diffusion alloyed product of the same composition. Ancorloy HP-1 is a hybrid alloy based on Ancorsteel 150 HP to which 4 w/o nickel and 2 w/o copper have been added during a binder-treated premixing operation. It is more highly alloyed than the hybrid alloy Ancorloy 4. Tempering as-sintered compacts made from Ancorloy HP-1 improves their tensile strength and tensile ductility.

### Typical Analysis and Properties

#### Composition (weight %)

Fe	Mo	Mn	Ni	Cu
Balance	1.4	0.15	4.0	2.0

#### Apparent Density

3.19 g/cm<sup>3</sup>

#### Flow

30 s/50 g

### Green and Sintered Density vs Compaction Pressure



